

Title (en)

POWER TOOL INCLUDING AN OUTPUT POSITION SENSOR

Title (de)

ELEKTROWERKZEUG MIT EINEM AUSGANGSPOSITIONSSENSOR

Title (fr)

OUTIL MÉCANIQUE COMPORTANT UN CAPTEUR DE POSITION DE SORTIE

Publication

EP 3419791 A4 20191113 (EN)

Application

EP 17757311 A 20170224

Priority

- US 201662299871 P 20160225
- US 201662374235 P 20160812
- US 2017019374 W 20170224

Abstract (en)

[origin: US2017246732A1] A power tool including a motor and an impact mechanism. The impact mechanism is coupled to the motor and includes a hammer driven by the motor, and an anvil positioned at a nose of the power tool, and configured to receive an impact from the hammer. The power tool also includes a sensor assembly positioned at the nose of the power tool, and an electronic processor. The sensor assembly includes an output position sensor configured to generate an output signal indicative of a position of the hammer or the anvil. The electronic processor is coupled to the output position sensor and to the motor, and is configured to operate the motor based on the output signal from the output position sensor.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

- [XYI] JP 2015033734 A 20150219 - MAKITA CORP
- [Y] US 2015165604 A1 20150618 - BARTOSZEK JASON CHRISTOPHER [US]
- [A] US 2002003045 A1 20020110 - BONGERS-AMBROSIUS HANS-WERNER [DE]
- [A] US 2003205393 A1 20031106 - HOOP ALEXANDER [LI], et al
- [A] WO 2015061370 A1 20150430 - MILWAUKEE ELECTRIC TOOL CORP [US]
- [A] US 2010061181 A1 20100311 - MALACKOWSKI DON [US], et al
- See also references of WO 2017147437A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10583545 B2 20200310; US 2017246732 A1 20170831; AU 2017223863 A1 20180823; AU 2017223863 B2 20191219;
CN 209125747 U 20190719; DK 3419791 T3 20220704; EP 3419791 A1 20190102; EP 3419791 A4 20191113; EP 3419791 B1 20220427;
EP 4056321 A1 20220914; ES 2913931 T3 20220606; JP 2019509182 A 20190404; JP 6706681 B2 20200610; KR 102184606 B1 20201130;
KR 20180108895 A 20181004; PL 3419791 T3 20220613; TW 201729957 A 20170901; TW I734749 B 20210801; TW M552413 U 20171201;
US 10272550 B2 20190430; US 11484999 B2 20221101; US 11813722 B2 20231114; US 2019022837 A1 20190124;
US 2020171632 A1 20200604; US 2023127853 A1 20230427; US 2024139919 A1 20240502; WO 2017147437 A1 20170831

DOCDB simple family (application)

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PL 17757311 T 20170224; TW 106106509 A 20170224; TW 106202809 U 20170224; US 2017019374 W 20170224;
US 201816142153 A 20180926; US 202016785823 A 20200210; US 202218051177 A 20221031; US 202318507992 A 20231113